



L24 ANSWER 371 OF 373 CROPU COPYRIGHT 2003 THOMSON DERWENT

ACCESSION NUMBER: 1998-89883 CROPU Q G

TITLE: Evaluation of butanone, carbon dioxide, and

1-octen-3-ol as attractants for mosquitoes

associated with north central Florida bay and cypress swamps.

AUTHOR: Kline D L; Mann M O

CORPORATE SOURCE: USDA-ARS

LOCATION: Gainesville, Fla., USA

SOURCE: J.Am.Mosq.Control Assoc. (14, No. 3, 289-97, 1998) 4 Fig. 6

Tab. 24 Ref.

CODEN: JAMAET

AVAIL. OF DOC .: United States Department of Agriculture, Agricultural

Research Service, Center for Medical, Agricultural and

Veterinary Entomology, PO Box 14565, Gainesville, FL 32604,

U.S.A.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

### ABSTRACT:

Responses of mosquitoes to attractants were studied in north central Florida bay and cypress swamps in 1991-93. A single, vacuum trap was set out at each site, with attractants released from near the inlet. Responses to traps baited with CO2 (200 ml/min) and/or light, different CO2 release rates (2, 20, 100, 200 or 2000 ml/min), and to butanone (0.97 mg/hr) or 1-octen-3-ol (octenol) (2.2 mg/hr) alone or + CO2 (200 ml/min) were compared in 3 trials. For most mosquito species, captures with light were greatly increased by the addition of CO2. Few species were \*\*\*attracted\*\*\* to octenol alone, but a synergistic effect was observed with octenol + CO2 for most Aedes, Psorophora, Anopheles, Coquillettidia and Mansonia spp., although many Culex sp. showed little attraction to octenol, alone or with CO2. Butanone increased responses of some species, but decreased captures of Culiseta melanura.

## ABSTRACT EXTENSION:

In 1991, studies were carried out in or around a red maple/sweet bay swamp, where domestic animals were kept, and in 1992-93, studies were carried out in an area of pond cypress swamp, without any domestic animals in the vicinity. single Model 515, CDC-type battery-powered trap was suspended from a metal pole, about 1.5 m above the ground at each site. Mosquitoes were sucked into the trap, and blown into a collecting jar containing a dichlorvos-impregnated strip. Octenol and butanone were released from glass vials a plastic lid and neoprene septum and wick, and CO2 was released from a compressed gas cylinder with a micrometering valve. Catch rates were recorded over 2-3 nights, in March and April. The main species captured with CO2 were: Aedes dupreei, Anopheles perplexens, Culiseta melanura, Culex erraticus and Mansonia titillans). CO2 elicited a response from all species studied, especially with light. CO2 + octenol had a synergistic effect, but only Aedes atlanticus and Ae. canadensis responded to octenol in large numbers. Octenol also repelled Cs. melanura. Butanone+ CO2 increased responses of Ae. infirmatus, Cx. salinarius, Coquillettidia perturbans and Psorophora ferox, but decreased responses of Cs. melanura. Other species captured were: Aedes fulvens pallens, Ae. mitchellae, Ae. sticticus, Ae. vexans, Anopheles crucians, An. punctipennis, An. quadrimaculatus, Culex nigripalpus, Cx. pilosus, Cx. restuans, Ps. ciliata, Ps. columbiae and Uranotaenia sapphirina.

SUBJECT HEADING: Q Chemosterilants

G Galenics

# CONTROLLED TERM:



AEDES \*TR; FULVENS \*TR; PALLENS \*TR; CANADENSIS \*TR; INFIRMATUS \*TR; MITCHELLAE \*TR; VEXANS \*TR; STICTICUS \*TR; DUPREEI \*TR; ATLANTICUS \*TR; ANOPHELES \*TR; PUNCTIPENNIS \*TR; CRUCIANS \*TR; QUADRIMACULATUS \*TR; PERPLEXENS \*TR; COQUILLETTIDIA \*TR; PERTURBANS \*TR; CULEX \*TR; ERRATICUS \*TR; CULISETA \*TR; MELANURA \*TR; PILOSUS \*TR; RESTUANS \*TR; NIGRIPALPUS \*TR; SALINARIUS \*TR; MANSONIA \*TR; TITILLANS \*TR; PSOROPHORA \*TR; CILIATA \*TR; COLUMBIAE \*TR; FEROX \*TR; URANOTAENIA \*TR; SAPPHIRINA \*TR; CULICIDAE \*TR; DIPTERA \*TR; INSECT-ATTRACTANT \*FT; VACUUM \*FT; TRAP \*FT; MONITORING \*FT; OCCURRENCE \*FT; POPULATION-DENSITY \*FT; SINGLY \*FT; COMB. \*FT; RELEASE-RATE \*FT; DOSAGE \*FT; SYNERGISM \*FT; FIELD \*FT; FLA. \*FT; ECOLOGY \*FT; USA \*FT; AREA-AMERICA \*FT; CARBON-DIOXIDE \*TR; CARBON-DIOXIDE \*IN; CO2 \*RN; TR \*FT; IN \*FT; OCTENOL-1,3 \*TR; OCTENOL-1,3 \*IN; OCTENOL13 \*RN; INSECT-ATTRACTANTS \*FT; BUTENONE \*TR; BUTENONE \*IN; BUTENONE \*RN; FUNGICIDES \*FT AB; LA; CT

FIELD AVAIL.:

```
L10 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2003 ACS
    624-92-0 REGISTRY
RN
    Disulfide, dimethyl (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
   Methyl disulfide (8CI)
OTHER NAMES:
     (Methyldithio) methane
CN
     2,3-Dithiabutane
CN
CN
     Dimethyl disulfide
     Dimethyl disulphide
CN
     Sulfa-Hitech
CN
     3D CONCORD
FS
     C2 H6 S2
MF
CI
     COM
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*,
       DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB,
       MEDLINE, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*,
       SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
                     DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
H3C-S-S-CH3
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            4431 REFERENCES IN FILE CA (1962 TO DATE)
              16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            4434 REFERENCES IN FILE CAPLUS (1962 TO DATE)
              44 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
L10 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2003 ACS
     127-17-3 REGISTRY
RN
     Propanoic acid, 2-oxo- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Pyruvic acid (8CI)
CN
OTHER NAMES:
     .alpha.-Ketopropionic acid
CN
CN
     2-Oxopropanoic acid
CN
     2-Oxopropionic acid
CN
     Acetylformic acid
CN
     BTS
     Pyroracemic acid
CN
     3D CONCORD
FS
     1892-67-7
DR
MF
     C3 H4 O3
CI
     COM
                  ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
LC
       BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,
       CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,
       DETHERM*, DIPPR*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT,
       IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*,
       PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, USPAT2,
       USPATFULL, VETU, VTB
         (*File contains numerically searchable property data)
                    DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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0
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Me-- C-- CO2H
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#### Me-C-CO2H \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\* 19001 REFERENCES IN FILE CA (1962 TO DATE) 254 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 19015 REFERENCES IN FILE CAPLUS (1962 TO DATE) 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967) L10 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2003 ACS RN 124-38-9 REGISTRY (CA INDEX NAME) CN Carbon dioxide (8CI, 9CI) OTHER NAMES: Carbon oxide (CO2) CN CN Carbon-12 dioxide CN Carbon-12C dioxide-1602 CN Carbonic acid anhydride Carbonic acid gas CN Carbonic anhydride CN Dry ice CN Khladon 744 CNCN R 744 FS 3D CONCORD 18923-20-1 DR MF C 02 CI COM LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB (\*File contains numerically searchable property data) DSL\*\*, EINECS\*\*, TSCA\*\* Other Sources: (\*\*Enter CHEMLIST File for up-to-date regulatory information)

o== c== o

MF

C5 H10 O

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

152057 REFERENCES IN FILE CA (1962 TO DATE)
621 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
152044 REFERENCES IN FILE CAPLUS (1962 TO DATE)
21 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

ANSWER 4 OF 9 REGISTRY COPYRIGHT 2003 ACS L10 RN107-87-9 REGISTRY CN2-Pentanone (8CI, 9CI) (CA INDEX NAME) OTHER NAMES: CN 4-Methyl-2-butanone CN Ethylacetone CN Methyl n-propyl ketone CNMethyl propyl ketone Propyl methyl ketone CNFS 3D CONCORD

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CI
     COM
                   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*,
       EMBASE, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO,
       SYNTHLINE, TOXCENTER, TULSA, USPAT2, USPATFULL, VTB
         (*File contains numerically searchable property data)
                      DSL**, EINECS**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
Me-C-Pr-n
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            4386 REFERENCES IN FILE CA (1962 TO DATE)
              24 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             4393 REFERENCES IN FILE CAPLUS (1962 TO DATE)
               5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
L10 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2003 ACS
     79-14-1 REGISTRY
     Acetic acid, hydroxy- (9CI) (CA INDEX NAME)
CN
OTHER CA INDEX NAMES:
     Glycolic acid (7CI, 8CI)
OTHER NAMES:
     .alpha.-Hydroxyacetic acid
CN
     2-Hydroxyacetic acid
CN
     Glycocide
CN
     GlyPure
CN
     GlyPure 70
CN
     Hydroxyacetic acid
CN
     Hydroxyethanoic acid
CN
FS
     3D CONCORD
DR
     259744-22-4
ΜF
     C2 H4 O3
CI
     COM
T<sub>1</sub>C
                 ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
       BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DIPPR*,
       DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*,
       HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS,
       NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, SYNTHLINE,
       TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU, VTB
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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617 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            7117 REFERENCES IN FILE CAPLUS (1962 TO DATE)
L10 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2003 ACS
    78-93-3 REGISTRY
    2-Butanone (8CI, 9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
    3-Butanone
CN
    Butanone
CN
    Ethyl methyl ketone
CN
    Methyl ethyl ketone
CN
FS
     3D CONCORD
DR
     135311-02-3
MF
     C4 H8 O
CI
     COM
LC
    STN Files:
                 AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM*,
       DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2,
       GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
       MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO,
       SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
H_3C-C-CH_2-CH_3
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
           19523 REFERENCES IN FILE CA (1962 TO DATE)
             173 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           19541 REFERENCES IN FILE CAPLUS (1962 TO DATE)
              10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
L10 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2003 ACS
     75-15-0 REGISTRY
RN
     Carbon disulfide (8CI, 9CI) (CA INDEX NAME)
CN
OTHER NAMES:
    Carbon bisulfide
CN
     Carbon bisulphide
CN
CN
     Carbon disulphide
     Carbon sulfide (CS2)
CN
    Dithiocarbonic anhydride
CN
FS
     3D CONCORD
     355120-85-3
DR
    C S2
ΜF
CI
    COM
                  AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU,
      DETHERM*, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,
      ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
      MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT,
      RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2,
      USPATFULL, VETU, VTB
         (*File contains numerically searchable property data)
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7110 REFERENCES IN FILE CA (1962 TO DATE)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

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\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

16577 REFERENCES IN FILE CA (1962 TO DATE)
278 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
16583 REFERENCES IN FILE CAPLUS (1962 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2003 ACS 67-64-1 REGISTRY CN 2-Propanone (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: Acetone (8CI) CNMethyl ketone (6CI) OTHER NAMES: .beta.-Ketopropane CN CN Dimethyl ketone CN Dimethylformaldehyde CN Propanone CN Pyroacetic ether 3D CONCORD FS MF C3 H6 O CI COM T.C

STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DDFU, DETHERM\*, DIOGENES, DIPPR\*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PHARMASEARCH, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VETU, VTB

(\*File contains numerically searchable property data)
Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

H<sub>3</sub>C-C-CH<sub>3</sub>

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

58466 REFERENCES IN FILE CA (1962 TO DATE)
547 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
58519 REFERENCES IN FILE CAPLUS (1962 TO DATE)
22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L10 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2003 ACS
RN 50-21-5 REGISTRY
CN Propanoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Lactic acid (7CI, 8CI)
OTHER NAMES:
CN (.+-.)-Lactic acid
CN .alpha.-Hydroxypropanoic acid

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.alpha.-Hydroxypropionic acid
CN
     2-Hydroxy-2-methylacetic acid
CN
CN
     2-Hydroxypropanoic acid
     2-Hydroxypropionic acid
CN
CN
     Biolac
CN
     Chem-Cast
     DL-Lactic acid
CN
     dl-Lactic acid
CN
CN
     Milk acid
     Purac FCC 88
CN
CN
     Tonsillosan
     3D CONCORD
FS
     152-36-3, 598-82-3
DR
MF
     C3 H6 O3
CI
     COM
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*,
       DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT,
       ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
       MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO,
       SYNTHLINE, TOXCENTER, TULSA, USAN, USPAT2, USPATFULL, VETU, VTB
         (*File contains numerically searchable property data)
     Other Sources: DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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ОН | Ме— СН— СО<sub>2</sub>Н

# \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

40116 REFERENCES IN FILE CA (1962 TO DATE)
1365 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
40148 REFERENCES IN FILE CAPLUS (1962 TO DATE)
1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L24 ANSWER 366 OF 373 CABA COPYRIGHT 2003 CABI

ACCESSION NUMBER: 1999:39788 CABA

DOCUMENT NUMBER:

990500870

TITLE:

Evaluation of butanone, carbon dioxide, and 1-octen-3-ol as attractants for

mosquitoes associated with north central

Florida bay and cypress swamps

AUTHOR:

SOURCE:

Kline, D. L.; Mann, M. O.

CORPORATE SOURCE:

United States Department of Agriculture,

Agricultural Research Service, Center for Medical,

Agricultural and Veterinary Entomology, PO Box

14565, Gainesville, FL 32604, USA.

Journal of the American Mosquito Control

Association, (1998) Vol. 14, No. 3, pp. 289-297. 25

ref.

ISSN: 8756-971X

DOCUMENT TYPE:

LANGUAGE: ABSTRACT:

Journal English

Field studies were conducted in 1991-93 to determine the responses of found in north central Florida, USA, bay and cypress swamps \*\*\*mosquitoes\*\*\* to carbon dioxide (CO2), light, butanone and 1-octen-3-ol (octenol), alone and CO2 in combination with each of the others. The response of these \*\*\*mosquito\*\*\* species to 5 CO2 release rates (2, 20, 100, 200 and 2000 ml/min) of CO2 was also determined. The use of CO2 resulted in a response in all the species studied; the pattern of response to increasing CO2 levels varied from species to species. In general, collection size increased as CO2 release rate increased; however, 5 species (Aedes dupreei, Anopheles perplexens, Culiseta melanura, Culex erraticus and Mansonia titillans) deviated from this pattern. Collection size of Aedes dupreei, Culiseta melanura and Culex erraticus decreased at the 2000 ml/min release rate. Collection size of Anopheles perplexens and M. titillans remained constant at each CO2 level to which these species responded. In the CO2 and light studies, the general pattern for collection size was: CO2 + light > CO2 alone > light alone. The combination CO2 + octenol (2.2 mg/h) resulted in a synergistic response (i.e. greater than the combined response obtained by CO2 and octenol alone) for all species except Culiseta melanura, Culex nigripalpus and C. restuans. Only 2 species (Aedes atlanticus and A. canadensis) responded to octenol in relatively large numbers (i.e. response to octenol alone more than or equal to 5% of that obtained by using CO2 alone at the 200 ml/min release rate). Octenol at the release rate tested repelled Culiseta melanura. The butanone + CO2 bait combination increased the responses compared to CO2 alone of A. infirmatus, Culex salinarius, Coquillettidia perturbans and Psorophora ferox, but decreased the response of Culiseta melanura.

CLASSIFICATION:

HH500 Repellents and Attractants; PP320 Wetlands; VV200 Parasites, Vectors, Pathogens and Biogenic

Diseases of Humans; LL300 Animal Behaviour

USA; Florida

GEOGRAPHIC TERM:

BROADER TERM:

Diptera; insects; arthropods; invertebrates; animals; Culicidae; Culiseta; Culex; Mansonia (Diptera); Aedes; Coquillettidia; Psorophora; Anopheles; Developed Countries; North America;

America; OECD Countries; Southeastern States of USA; Southern States of USA; USA; Gulf States of USA;

South Atlantic States of USA

CONTROLLED TERM:

surveillance; host-seeking behaviour; evaluation;

insect attractants; swamps; carbon

dioxide; light traps; monitoring; bait traps;

sampling; trapping

SUPPLEMENTARY TERM:

butanone; 1-octen-3-ol; octenol; Aedes

dupreei; Anopheles perplexens; Aedes mitchellae

CAS REGISTRY NUMBER:

124-38-9

ORGANISM NAME:

Culicidae; Aedes; Anopheles; Culex; Culiseta melanura; Culex erraticus; Mansonia titillans; Culex nigripalpus; Culex restuans; Aedes atlanticus; Aedes canadensis; Aedes infirmatus; Culex salinarius; Coquillettidia perturbans; Psorophora ferox; Aedes vexans; Anopheles crucians; Anopheles punctipennis; Anopheles quadrimaculatus d his ful

(FILE 'HOME' ENTERED AT 11:32:54 ON 06 APR 2003)

FILE 'REGISTRY' ENTERED AT 11:33:03 ON 06 APR 2003 L1 1 SEA LACTIC ACID/CN L21 SEA DIMETHYL DISULFIDE/CN  $L_3$ 1 SEA CARBON DIOXIDE/CN L41 SEA 2-PENTANONE/CN L5 1 SEA ACETONE/CN L6 1 SEA PYRUVIC ACID/CN L7 1 SEA GLYCOLIC ACID/CN L8 1 SEA BUTANONE/CN L9 1 SEA CARBON DISULFIDE/CN L10 9 SEA L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 D 1-9 FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 11:35:41 ON 06 APR 2003 L11409102 SEA (L1 OR LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACE TIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88 OR TONSILLOSAN) L12 170139 SEA L8 OR BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE OR ETHYLMETHYLKETONE OR METHYLETHYLKETONE OR ETHYLMETHYL KETONE OR METHYLETHYL KETONE OR METHYL ETHYLKETONE OR ETHYL METHYLKETONE L13 8400 SEA L11 AND L12 L14 50 SEA L13 AND (MOSQUITO?) D 1-50 FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 12:26:16 ON 06 APR 2003 D 1-50 D 50 IALL 1241 SEA L12 AND MOSQUITO? L15L16 1194 DUP REM L15 (47 DUPLICATES REMOVED) L17 394507 SEA LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACETIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88 OR TONSILLOSAN L18 161696 SEA BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE OR ETHYLMETHYLKETONE OR METHYLETHYLKETONE OR ETHYLMETHYL KETONE OR METHYLETHYL KETONE OR METHYL ETHYLKETONE OR ETHYL METHYLKETO NE L19 88 SEA L17 (5A) L18 L20 67 DUP REM L19 (21 DUPLICATES REMOVED) D 1-67 D 67 KWIC

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS,

D 53 KWIC

305 SEA L17 (25A) L18

373 SEA L15 AND ATTRACT?

195 SEA L22 NOT L20 D 1-195

D 1-373

260 DUP REM L21 (45 DUPLICATES REMOVED)

L21

L22

L23

L24

BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 12:46:46 ON 06 APR 2003

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D 363 IALL
D 366 IALL
D 373
D 366-372
D 372 IALL
D 371 IALL
346 DUP REM L24 (27 DUPLICATES REMOVED)
D 1-346
D 262 KWIC
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FILE 'STNGUIDE' ENTERED AT 13:04:20 ON 06 APR 2003

D 242 KWIC D 90 IALL

L25

> d his ful

(FILE 'HOME' ENTERED AT 11:32:54 ON 06 APR 2003)

FILE 'REGISTRY' ENTERED AT 11:33:03 ON 06 APR 2003 L11 SEA LACTIC ACID/CN L21 SEA DIMETHYL DISULFIDE/CN L3 1 SEA CARBON DIOXIDE/CN L41 SEA 2-PENTANONE/CN L5 1 SEA ACETONE/CN L6 1 SEA PYRUVIC ACID/CN L7 1 SEA GLYCOLIC ACID/CN L8 1 SEA BUTANONE/CN Ь9 1 SEA CARBON DISULFIDE/CN L10 9 SEA L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 D 1-9

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 11:35:41 ON 06 APR 2003

L11 409102 SEA (L1 OR LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACE
TIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY
PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88
OR TONSILLOSAN)

L\*\*\* DEL 170139 S L8 OR BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE

L\*\*\* DEL 8400 S L11 AND L\*\*\*

L\*\*\* DEL 50 S L\*\*\* AND (MOSQUITO?)

D 1-50

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 12:26:16 ON 06 APR 2003

D 1-50

D 50 IALL

L\*\*\* DEL 1241 S L\*\*\* AND MOSQUITO?

L\*\*\* DEL 1194 DUP REM L\*\*\* (47 DUPLICATES REMOVED)

L17 394507 SEA LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACETIC OR
HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR
BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88 OR TONSILLOSAN

L\*\*\* DEL 161696 S BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE OR ET

L\*\*\* DEL 88 S L17 (5A) L18

L\*\*\* DEL 67 DUP REM L20 (21 DUPLICATES REMOVED)

D 1-67

D 67 KWIC

D 53 KWIC

L\*\*\* DEL 305 S L17 (25A) L18

L\*\*\* DEL 260 DUP REM L21 (45 DUPLICATES REMOVED)

L\*\*\* DEL 195 S L21 NOT L20

D 1-195

L\*\*\* DEL 373 S L\*\*\* AND ATTRACT?

D 1-373

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 12:46:46 ON 06 APR 2003

D 363 IALL

D 366 IALL

D 373 D 366-372 D 372 IALL D 371 IALL 346 DUP REM L\*\*\* (27 DUPLICATES REMOVED) L\*\*\* DEL D 1-346 D 262 KWIC D 242 KWIC D 90 IALL FILE 'STNGUIDE' ENTERED AT 13:04:20 ON 06 APR 2003 FILE 'BIOSIS, EUROPATFULL, CAPLUS, IFIPAT, LIFESCI, SCISEARCH, USPATFULL, HSDB, CROPU' ENTERED AT 13:23:02 ON 06 APR 2003 D 70 IALL FILE 'STNGUIDE' ENTERED AT 13:23:03 ON 06 APR 2003 0 S PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR ETHYLAC L\*\*\* DEL FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... ' ENTERED AT 13:30:11 ON 06 APR 2003 33462 SEA PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR L18 ETHYLACETONE OR METHYL (2A) PROPYL KETONE OR METHYLPROPYLKETONE OR METHYLPROPYL KETONE OR METHYL PROPYLKETONE OR PROPYLMETHYLK ETONE OR PROPYL METHYLKETONE OR PROPYL METHYL KETONE 2164 SEA L11 AND (L4 OR L18) L19 409102 SEA L11 L20 35253 SEA L4 OR L18 L21 L22 2171 SEA L20 AND L21 17 SEA L22 AND MOSQUITO? L23 D 1-17 D 17 KWIC D 17 IALL L24 44 SEA L21 AND MOSQUITO? AND ATTRACT? D 1-44

D 14 KWIC

d his ful

(FILE 'HOME' ENTERED AT 11:32:54 ON 06 APR 2003)

FILE 'REGISTRY' ENTERED AT 11:33:03 ON 06 APR 2003 1.1 1 SEA LACTIC ACID/CN L21 SEA DIMETHYL DISULFIDE/CN L3 1 SEA CARBON DIOXIDE/CN L41 SEA 2-PENTANONE/CN 1 SEA ACETONE/CN L51 SEA PYRUVIC ACID/CN L6 1 SEA GLYCOLIC ACID/CN L71 SEA BUTANONE/CN L8L9 1 SEA CARBON DISULFIDE/CN 9 SEA L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 L10

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 11:35:41 ON 06 APR

2003

409102 SEA (L1 OR LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACE L11TIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88 OR TONSILLOSAN)

L\*\*\* DEL 170139 S L8 OR BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE

L\*\*\* DEL 8400 S L11 AND L\*\*\*

50 S L\*\*\* AND (MOSQUITO?) L\*\*\* DEL D 1-50

D 1-9

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... ' ENTERED AT 12:26:16 ON 06 APR 2003

> D 1-50 D 50 IALL

L\*\*\* DEL 1241 S L\*\*\* AND MOSQUITO?

L\*\*\* DEL 1194 DUP REM L\*\*\* (47 DUPLICATES REMOVED)

L17 394507 SEA LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACETIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88 OR TONSILLOSAN

L\*\*\* DEL 161696 S BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE OR ET

L\*\*\* DEL 88 S L17 (5A) L18

L\*\*\* DEL 67 DUP REM L19 (21 DUPLICATES REMOVED)

D 1-67

D 67 KWIC

D 53 KWIC

L\*\*\* DEL 305 S L17 (25A) L18

L\*\*\* DEL 260 DUP REM L21 (45 DUPLICATES REMOVED)

L\*\*\* DEL 195 S L21 NOT L20

D 1-195

L\*\*\* DEL 373 S L\*\*\* AND ATTRACT? D 1-373

> FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 12:46:46 ON 06 APR 2003

> > D 363 IALL

D 366 IALL

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D 366-372
                D 372 IALL
                D 371 IALL
            346 DUP REM L*** (27 DUPLICATES REMOVED)
L*** DEL
                D 1-346
                D 262 KWIC
                D 242 KWIC
                D 90 IALL
     FILE 'STNGUIDE' ENTERED AT 13:04:20 ON 06 APR 2003
     FILE 'BIOSIS, EUROPATFULL, CAPLUS, IFIPAT, LIFESCI, SCISEARCH, USPATFULL,
     HSDB, CROPU' ENTERED AT 13:23:02 ON 06 APR 2003
                D 70 IALL
     FILE 'STNGUIDE' ENTERED AT 13:23:03 ON 06 APR 2003
L*** DEL
              O S PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR ETHYLAC
     FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS,
     BABS. BIOBUSINESS. BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN,
     CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL,
     DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 13:30:11 ON 06 APR
     2003
L*** DEL 33462 S PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR ETHYLAC
L*** DEL
          2164 S L11 AND (L4 OR L18)
L*** DEL 409102 S L11
L*** DEL 35253 S L4 OR L18
L*** DEL
           2171 S L20 AND L21
L*** DEL
             17 S L22 AND MOSOUITO?
                D 1-17
                D 17 KWIC
                D 17 IALL
L*** DEL
             44 S L21 AND MOSOUITO? AND ATTRACT?
                D 1-44
                D 14 KWIC
              3 SEA ACETONE (5A) ATTRACT? (5A) MOSQUITO?
L18
                D 1-3
L19
              7 SEA ACETONE (15A) ATTRACT? (15A) MOSQUITO?
                D 1-7
                D 7 KWIC
                D 2 IALL
L20
             10 SEA ACETONE (25A) ATTRACT? (25A) MOSOUITO?
                D 1-10
                D 6 KWIC
             24 SEA ACETONE (55A) ATTRACT? (55A) MOSQUITO?
L21
                D 1-24
                D 24 IALL
             59 SEA ACETONE (9999A) ATTRACT? (9999A) MOSQUITO?
L22
             45 DUP REM L22 (14 DUPLICATES REMOVED)
L23
                D 1-45
L*** DEL
              0 S (METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR KETO PROPANE
L*** DEL
             13 S (METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR KETO PROPANE
                D 1-13
L24
            517 SEA (ACETONE OR METHYLKETONE OR METHYL KETONE OR KETOPROPANE
                OR KETO PROPANE OR DIMETHYKETONE OR DIMETHYL KETONE OR
                DIMETHYLFORMALDEHYDE OR DIMETHYL FORMALDEHYDE OR PROPANONE OR
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PYROACETIC ETHER OR PYROACETICETHER) (L) ATTRACT? (L) MOSQUITO?

D 373

> d his ful

L10

(FILE 'HOME' ENTERED AT 11:32:54 ON 06 APR 2003)

FILE 'REGISTRY' ENTERED AT 11:33:03 ON 06 APR 2003 1 SEA LACTIC ACID/CN L11 SEA DIMETHYL DISULFIDE/CN L21 SEA CARBON DIOXIDE/CN L31 SEA 2-PENTANONE/CN L41 SEA ACETONE/CN  $L_5$ 1 SEA PYRUVIC ACID/CN L6 1 SEA GLYCOLIC ACID/CN L71 SEA BUTANONE/CN L81 SEA CARBON DISULFIDE/CN L9

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL,

9 SEA L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9

DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 11:35:41 ON 06 APR 2003

L11 409102 SEA (L1 OR LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACE TIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88

OR TONSILLOSAN)
L\*\*\* DEL 170139 S L8 OR BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE

L\*\*\* DEL 8400 S L11 AND L\*\*\*

L\*\*\* DEL 50 S L\*\*\* AND (MOSQUITO?)
D 1-50

D 1-9

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 12:26:16 ON 06 APR 2003

D 1-50

D 50 IALL

L\*\*\* DEL 1241 S L\*\*\* AND MOSQUITO?

L\*\*\* DEL 1194 DUP REM L\*\*\* (47 DUPLICATES REMOVED)

L17 394507 SEA LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACETIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88 OR TONSILLOSAN

L\*\*\* DEL 161696 S BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE OR ET

L\*\*\* DEL 88 S L17 (5A) L18

L\*\*\* DEL 67 DUP REM L19 (21 DUPLICATES REMOVED)

D 1-67

D 67 KWIC

D 53 KWIC

L\*\*\* DEL 305 S L17 (25A) L18

L\*\*\* DEL 260 DUP REM L21 (45 DUPLICATES REMOVED)

L\*\*\* DEL 195 S L21 NOT L20

D 1-195

L\*\*\* DEL 373 S L\*\*\* AND ATTRACT?

D 1-373

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 12:46:46 ON 06 APR 2003

D 363 IALL

D 366 IALL

D 373 D 366-372 D 372 IALL D 371 IALL 346 DUP REM L\*\*\* (27 DUPLICATES REMOVED) L\*\*\* DEL  $D_{1-346}$ D 262 KWIC D 242 KWIC D 90 IALL FILE 'STNGUIDE' ENTERED AT 13:04:20 ON 06 APR 2003 FILE 'BIOSIS, EUROPATFULL, CAPLUS, IFIPAT, LIFESCI, SCISEARCH, USPATFULL, HSDB, CROPU' ENTERED AT 13:23:02 ON 06 APR 2003 D 70 IALL FILE 'STNGUIDE' ENTERED AT 13:23:03 ON 06 APR 2003 O S PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR ETHYLAC L\*\*\* DEL FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... ' ENTERED AT 13:30:11 ON 06 APR 2003 L\*\*\* DEL 33462 S PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR ETHYLAC 2164 S L11 AND (L4 OR L18) L\*\*\* DEL L\*\*\* DEL 409102 S L11 L\*\*\* DEL 35253 S L4 OR L18 L\*\*\* DEL 2171 S L20 AND L21 17 S L\*\*\* AND MOSQUITO? L\*\*\* DEL D 1-17 D 17 KWIC D 17 IALL L\*\*\* DEL 44 S L21 AND MOSQUITO? AND ATTRACT? D 1-44 D 14 KWIC 3 S ACETONE (5A) ATTRACT? (5A) MOSQUITO? L\*\*\* DEL D 1 - 3L\*\*\* DEL 7 S ACETONE (15A) ATTRACT? (15A) MOSQUITO? D 1-7 D 7 KWIC D 2 IALL 10 S ACETONE (25A) ATTRACT? (25A) MOSQUITO? L\*\*\* DEL D 1-10 D 6 KWIC 24 S ACETONE (55A) ATTRACT? (55A) MOSQUITO? L\*\*\* DEL D 1-24 D 24 IALL 59 S ACETONE (9999A) ATTRACT? (9999A) MOSQUITO? L\*\*\* DEL L\*\*\* DEL 45 DUP REM L\*\*\* (14 DUPLICATES REMOVED) D 1-45 O S (METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR KETO PROPANE L\*\*\* DEL 13 S (METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR KETO PROPANE L\*\*\* DEL D 1-13 517 S (ACETONE OR METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR K L\*\*\* DEL 490 DUP REM L\*\*\* (27 DUPLICATES REMOVED) L\*\*\* DEL D 1-490 D 487 IALL D 280 KWIC D 214 IALL D 176 KWIC 33462 SEA PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR L18 ETHYLACETONE OR METHYL (2A) PROPYL KETONE OR METHYLPROPYLKETONE OR METHYLPROPYL KETONE OR METHYL PROPYLKETONE OR PROPYLMETHYLK

KETONE
OR KETOPROPANE
ETONE OR
OR PROPANONE OR
XIDE)

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# > d his ful

(FILE 'HOME' ENTERED AT 11:32:54 ON 06 APR 2003)

FILE 'REGISTRY' ENTERED AT 11:33:03 ON 06 APR 2003 L1 1 SEA LACTIC ACID/CN L21 SEA DIMETHYL DISULFIDE/CN L3 1 SEA CARBON DIOXIDE/CN L41 SEA 2-PENTANONE/CN L5 1 SEA ACETONE/CN 1 SEA PYRUVIC ACID/CN L6 1 SEA GLYCOLIC ACID/CN L7 L81 SEA BUTANONE/CN L9 1 SEA CARBON DISULFIDE/CN 9 SEA L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 L10

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 11:35:41 ON 06 APR 2003

L11 409102 SEA (L1 OR LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACE
TIC OR HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY
PROPIONIC OR BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88
OR TONSILLOSAN)

L\*\*\* DEL 170139 S L8 OR BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE

L\*\*\* DEL 8400 S L11 AND L\*\*\*

L\*\*\* DEL 50 S L\*\*\* AND (MOSQUITO?)
D 1-50

D 1-9

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 12:26:16 ON 06 APR 2003

D 1-50 D 50 IALL

L\*\*\* DEL 1241 S L\*\*\* AND MOSQUITO?

L\*\*\* DEL 1194 DUP REM L\*\*\* (47 DUPLICATES REMOVED)

L17 394507 SEA LACTIC OR HYDROXYPROPANOIC OR HYDROXY (2A) METHYLACETIC OR
HYDROXYPROPIONIC OR HYDROXY PROPANOIC OR HYDROXY PROPIONIC OR
BIOLAC OR CHAM CAST OR MILK ACID OR PURAC FCC 88 OR TONSILLOSAN

L\*\*\* DEL 161696 S BUTANONE OR ETHYL METHYL KETONE OR METHYL ETHYL KETONE OR ET

L\*\*\* DEL 88 S L17 (5A) L18

L\*\*\* DEL 67 DUP REM L19 (21 DUPLICATES REMOVED)

D 1-67

D 67 KWIC

D 53 KWIC

L\*\*\* DEL 305 S L17 (25A) L18

L\*\*\* DEL 260 DUP REM L21 (45 DUPLICATES REMOVED)

L\*\*\* DEL 195 S L21 NOT L20

D 1-195

L\*\*\* DEL 373 S L\*\*\* AND ATTRACT? D 1-373

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 12:46:46 ON 06 APR 2003

D 363 IALL

D 366 IALL

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D 373
                D 366-372
                D 372 IALL
                D 371 TALL
            346 DUP REM L*** (27 DUPLICATES REMOVED)
L*** DEL
                D_{1-346}
                D 262 KWIC
                D 242 KWIC
                D 90 IALL
     FILE 'STNGUIDE' ENTERED AT 13:04:20 ON 06 APR 2003
     FILE 'BIOSIS, EUROPATFULL, CAPLUS, IFIPAT, LIFESCI, SCISEARCH, USPATFULL,
     HSDB, CROPU' ENTERED AT 13:23:02 ON 06 APR 2003
                D 70 IALL
     FILE 'STNGUIDE' ENTERED AT 13:23:03 ON 06 APR 2003
L*** DEL
              O S PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR ETHYLAC
     FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS,
     BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN,
     CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL,
     DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 13:30:11 ON 06 APR
     2003
L*** DEL 33462 S PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR ETHYLAC
          2164 S L11 AND (L4 OR L18)
L*** DEL
L*** DEL 409102 S L11
L*** DEL 35253 S L4 OR L18
L*** DEL
           2171 S L20 AND L21
L*** DEL
             17 S L22 AND MOSOUITO?
                D 1-17
                D 17 KWIC
                D 17 IALL
L*** DEL
             44 S L21 AND MOSOUITO? AND ATTRACT?
                D 1-44
                D 14 KWIC
              3 S ACETONE (5A) ATTRACT? (5A) MOSQUITO?
L*** DEL
                D 1-3
              7 S ACETONE (15A) ATTRACT? (15A) MOSQUITO?
L*** DEL
                D 1-7
                D 7 KWIC
                D 2 IALL
L*** DEL
             10 S ACETONE (25A) ATTRACT? (25A) MOSOUITO?
                D 1-10
                D 6 KWIC
             24 S ACETONE (55A) ATTRACT? (55A) MOSQUITO?
L*** DEL
                D 1-24
                D 24 IALL
             59 S ACETONE (9999A) ATTRACT? (9999A) MOSQUITO?
L*** DEL
             45 DUP REM L22 (14 DUPLICATES REMOVED)
L*** DEL
                D 1-45
L*** DEL
              O S (METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR KETO PROPANE
             13 S (METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR KETO PROPANE
L*** DEL
                D 1-13
L*** DEL
            517 S (ACETONE OR METHYLKETONE OR METHYL KETONE OR KETOPROPANE OR K
L*** DEL
            490 DUP REM L*** (27 DUPLICATES REMOVED)
                D 1-490
                D 487 IALL
                D 280 KWIC
                D 214 IALL
                D 176 KWIC
L18
          33462 SEA PENTANONE OR METHYL (2A) BUTANONE OR ETHYL ACETONE OR
                ETHYLACETONE OR METHYL (2A) PROPYL KETONE OR METHYLPROPYLKETONE
                 OR METHYLPROPYL KETONE OR METHYL PROPYLKETONE OR PROPYLMETHYLK
```

		ETONE OR PROPYL METHYLKETONE OR PROPYL METHYL KETONE
L19	43	SEA L18 (25A) L17
		D 1-43
		D 1-43 KWIC
L20	1590	SEA (ACETONE OR METHYLKETONE OR METHYL KETONE OR KETOPROPANE
		OR KETO PROPANE OR DIMETHYKETONE OR DIMETHYL KETONE OR
		DIMETHYLFORMALDEHYDE OR DIMETHYL FORMALDEHYDE OR PROPANONE OR
		PYROACETIC ETHER OR PYROACETICETHER) (25A) L17
L21	65	SEA L20 (25A) (CO2 OR CO".SUB."2 OR CARBON DIOXIDE)
		D 1-65
		D 39 KWIC
		D 39
		D 39 IALL
L22	14	SEA L20 AND ATTRACT? AND MOSQUITO?
		D 1-14
L23	27	SEA (ACETONE OR METHYLKETONE OR METHYL KETONE OR KETOPROPANE
		OR KETO PROPANE OR DIMETHYKETONE OR DIMETHYL KETONE OR
		DIMETHYLFORMALDEHYDE OR DIMETHYL FORMALDEHYDE OR PROPANONE OR
		PYROACETIC ETHER OR PYROACETICETHER) (L) L17 AND ATTRACT? AND
		MOSQUITO?
		D 1-27
		D 3 IALL

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(FILE 'HOME' ENTERED AT 16:32:02 ON 06 APR 2003)

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 16:32:29 ON 06 APR 2003

```
L1
          36081 S LACTIC ACID/CN
         394725 S LACTIC OR HYDROXYPROPIONIC OR HYDROXY PROPIONIC OR HYDROXYMET
L2
           1258 S DIMETHYL DISULFIDE/CN
L3
          12000 S DIMETHYLDISULFIDE OR DIMETHYLDISULPHIDE OR (DIMETHYL OR METHY
L4
         394725 S L1 OR L2
L5
          12000 S L3 OR L4
L6
            451 S L5 AND L6
L7
             65 S L7 AND MOSQUITO?
L8
            119 S L6 AND MOSQUITO? NOT L8
L9
            112 DUP REM L9 (7 DUPLICATES REMOVED)
L10
             30 S L10 AND ATTRACT?
L11
L12
            386 S L7 NOT (MOSQUITO?)
```

#### => d his ful

(FILE 'HOME' ENTERED AT 16:32:02 ON 06 APR 2003)

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 16:32:29 ON 06 APR 2003

```
L1
          36081 SEA LACTIC ACID/CN
         394725 SEA LACTIC OR HYDROXYPROPIONIC OR HYDROXY PROPIONIC OR
1.2
                HYDROXYMETHYLACETIC OR HYDROXY (2A) METHYLACETIC OR HYDROXYMETH
                YL ACETIC OR HYDROXY (2A) METHYL ACETIC OR HYDROXYPROPANOIC OR
                HYDROXY PROPANOIC OR BIOLAC OR CHEM CAST OR MILK ACID OR
                PURACC FCC 88 OR TONSILLOSAN
           1258 SEA DIMETHYL DISULFIDE/CN
L3
          12000 SEA DIMETHYLDISULFIDE OR DIMETHYLDISULPHIDE OR (DIMETHYL OR
L4
                METHYL) (A) (DISULPHIDE OR DISULFIDE) OR METHYLDISULFIDE OR
                METHYLDISULPHIDE OR METHYLDITHIOMETHANE OR METHYLDITHIO
                METHANE OR METHYL DITHIOMETHANE OR METHYL DITHIO METHANE OR
                DITHIABUTANE OR DITHIA BUTANE SULFA-HITECH
1.5
         394725 SEA L1 OR L2
          12000 SEA L3 OR L4
L6
            451 SEA L5 AND L6
L7
             65 SEA L7 AND MOSQUITO?
L8
                D 1-65
            119 SEA L6 AND MOSQUITO? NOT L8
L9
            112 DUP REM L9 (7 DUPLICATES REMOVED)
L10
             30 SEA L10 AND ATTRACT?
L11
                D 1-30
            386 SEA L7 NOT (MOSQUITO?)
L12
                D L10 1-112
```

### FILE HOME

FILE EMBASE

FILE COVERS 1974 TO 3 Apr 2003 (20030403/ED)

D 1- KWIC

EMBASE has been reloaded. Enter HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS FILE COVERS 1969 TO DATE. CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 2 April 2003 (20030402/ED)

FILE EUROPATFULL

FILE LAST UPDATED: 1 APR 2003 <20030401/UP>
MOST RECENT EPO WEEK: 200313 <200313/EW>

FILE COVERS 1987 TO DATE

>>>>The LIMIT feature has been removed <<<<

## => d his ful

L8

L9

L10

L11

L12

(FILE 'HOME' ENTERED AT 16:32:02 ON 06 APR 2003)

DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 16:32:29 ON 06 APR 2003 36081 SEA LACTIC ACID/CN L1 394725 SEA LACTIC OR HYDROXYPROPIONIC OR HYDROXY PROPIONIC OR L2HYDROXYMETHYLACETIC OR HYDROXY (2A) METHYLACETIC OR HYDROXYMETH YL ACETIC OR HYDROXY (2A) METHYL ACETIC OR HYDROXYPROPANOIC OR HYDROXY PROPANOIC OR BIOLAC OR CHEM CAST OR MILK ACID OR PURACC FCC 88 OR TONSILLOSAN 1258 S DIMETHYL DISULFIDE/CN L\*\*\* DEL L\*\*\* DEL 12000 S DIMETHYLDISULFIDE OR DIMETHYLDISULPHIDE OR (DIMETHYL OR METHY L\*\*\* DEL 394725 S L1 OR L2 L\*\*\* DEL 12000 S L3 OR L\*\*\* L\*\*\* DEL 451 S L5 AND L6 L\*\*\* DEL 65 S L7 AND MOSQUITO? D 1-65 L\*\*\* DEL 119 S L6 AND MOSQUITO? NOT L8 L\*\*\* DEL 112 DUP REM L9 (7 DUPLICATES REMOVED) L\*\*\* DEL 30 S L10 AND ATTRACT? D 1-30 L\*\*\* DEL 386 S L7 NOT (MOSQUITO?) D L10 1-112 D 1- KWIC 2237 SEA GLYCOLIC ACID/CN L\*\*\* DEL 1792 S GLYCOLIC AND HYDROXYACETIC OR HYDROXY ACETIC OR GLYCOCIDE OR 394725 SEA L1 OR L2 L5 L\*\*\* DEL 4006 S L3 OR L\*\*\* L\*\*\* DEL 1459 S L5 AND L6 L\*\*\* DEL 2 S L7 AND MOSOUITO? D 1-D 2 IALL 58420 SEA GLYCOLIC OR HYDROXYACETIC OR HYDROXY ACETIC OR GLYCOCIDE L6 OR GLYPURE OR HYDROXY ETHANOIC OR HYDROXYETHANOIC L7 58520 SEA L3 OR L6

1785158 SEA CARBON DIOXIDE/CN OR CO2 OR CO".SUB."2 OR CARBON DIOXIDE

155 SEA (CO2 OR CO".SUB."2 OR CARBON DIOXIDE) (50A) L2 (50A) L6

44 SEA L7 AND MOSQUITO? AND ATTRACT?

127 DUP REM L11 (28 DUPLICATES REMOVED)

D 1-44

5253 SEA L5 AND L7 AND L9

D 1-50 KWIC D 50-60 KWIC D 61-90 D 90- KWIC

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL,

(FILE 'HOME' ENTERED AT 16:32:02 ON 06 APR 2003)

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS, BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN, CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ...' ENTERED AT 16:32:29 ON 06 APR 2003

```
36081 SEA LACTIC ACID/CN
L1
         394725 SEA LACTIC OR HYDROXYPROPIONIC OR HYDROXY PROPIONIC OR
L2
                HYDROXYMETHYLACETIC OR HYDROXY (2A) METHYLACETIC OR HYDROXYMETH
                YL ACETIC OR HYDROXY (2A) METHYL ACETIC OR HYDROXYPROPANOIC OR
                HYDROXY PROPANOIC OR BIOLAC OR CHEM CAST OR MILK ACID OR
                PURACC FCC 88 OR TONSILLOSAN
           1258 S DIMETHYL DISULFIDE/CN
L*** DEL
L*** DEL 12000 S DIMETHYLDISULFIDE OR DIMETHYLDISULPHIDE OR (DIMETHYL OR METHY
L*** DEL 394725 S L1 OR L2
L*** DEL 12000 S L*** OR L***
L*** DEL
            451 S L5 AND L6
L*** DEL
             65 S L7 AND MOSOUITO?
                D 1-65
            119 S L6 AND MOSQUITO? NOT L8
L*** DEL
L*** DEL
            112 DUP REM L9 (7 DUPLICATES REMOVED)
L*** DEL
             30 S L10 AND ATTRACT?
                D 1-30
            386 S L7 NOT (MOSQUITO?)
L*** DEL
                D L10 1-112
                D 1- KWIC
L*** DEL
           2237 S GLYCOLIC ACID/CN
L*** DEL
           1792 S GLYCOLIC AND HYDROXYACETIC OR HYDROXY ACETIC OR GLYCOCIDE OR
         394725 SEA L1 OR L2
L*** DEL
           4006 S L*** OR L***
L*** DEL
           1459 S L5 AND L6
L*** DEL
              2 S L7 AND MOSQUITO?
                D 1-
                D 2 IALL
L*** DEL 58420 S GLYCOLIC OR HYDROXYACETIC OR HYDROXY ACETIC OR GLYCOCIDE OR G
L*** DEL
          58520 S L*** OR L6
             44 S L7 AND MOSQUITO? AND ATTRACT?
L*** DEL
                D 1-44
L*** DEL1785158 S CARBON DIOXIDE/CN OR CO2 OR CO".SUB."2 OR CARBON DIOXIDE
L*** DEL
          5253 S L5 AND L7 AND L9
L*** DEL
            155 S (CO2 OR CO".SUB."2 OR CARBON DIOXIDE) (50A) L2 (50A) L6
L*** DEL
            127 DUP REM L13 (28 DUPLICATES REMOVED)
                D 1-50 KWIC
                D 50-60 KWIC
                D 61-90
                D 90- KWIC
           6813 SEA CARBON DISULFIDE/CN
L6
          69209 SEA (CARBON) (A) (DISULFIDE OR DISULPHIDE OR BISULFIDE OR
L7
                BISULPHIDE) OR DITHIOCARBONICANHYDRIDE OR DITHIO CARBONIC
                ANHYDRIDE OR DITHIOCARBONIC ANHYDRIDE OR DITHIO CARBONICANHYDRI
                DE
L8
          69209 SEA L6 OR L7
L9
           1424 SEA L8 AND L5
           1381 DUP REM L9 (43 DUPLICATES REMOVED)
L10
L11
            167 SEA L8 AND MOSOUITO?
L12
            161 DUP REM L11 (6 DUPLICATES REMOVED)
                D 1-161
L13
            584 SEA (CARBON DIOXIDE/CN OR CO2 OR CO".SUB."2 OR CARBON DIOXIDE)
```

L14 570 DUP REM L13 (14 DUPLICATES REMOVED)
D 1-570 KWIC

AND L5 AND L8

L15 811 SEA L10 NOT L13

D 1- KWUC

D 811 IALL

D 129

D 129 IALL

## => d his ful

(FILE 'HOME' ENTERED AT 16:32:02 ON 06 APR 2003)

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BABS, BIOBUSINESS, BIOCOMMERCE, BIOTECHNO, CANCERLIT, CAPLUS, CBNB, CEN,
     CIN, CONFSCI, DGENE, DIOGENES, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL,
     DRUGU, DRUGUPDATES, EMBAL, ESBIOBASE, ... 'ENTERED AT 16:32:29 ON 06 APR
     2003
L1
          36081 SEA LACTIC ACID/CN
         394725 SEA LACTIC OR HYDROXYPROPIONIC OR HYDROXY PROPIONIC OR
L2
                HYDROXYMETHYLACETIC OR HYDROXY (2A) METHYLACETIC OR HYDROXYMETH
                YL ACETIC OR HYDROXY (2A) METHYL ACETIC OR HYDROXYPROPANOIC OR
                HYDROXY PROPANOIC OR BIOLAC OR CHEM CAST OR MILK ACID OR
                PURACC FCC 88 OR TONSILLOSAN
           1258 S DIMETHYL DISULFIDE/CN
L*** DEL
L*** DEL 12000 S DIMETHYLDISULFIDE OR DIMETHYLDISULPHIDE OR (DIMETHYL OR METHY
L*** DEL 394725 S L1 OR L2
L*** DEL 12000 S L*** OR L***
L*** DEL
            451 S L5 AND L6
L*** DEL
             65 S L7 AND MOSQUITO?
                D 1-65
L*** DEL
            119 S L6 AND MOSQUITO? NOT L***
L*** DEL
            112 DUP REM L*** (7 DUPLICATES REMOVED)
L*** DEL
            30 S L*** AND ATTRACT?
                D 1-30
L*** DEL
            386 S L7 NOT (MOSQUITO?)
                D L*** 1-112
                D 1- KWIC
L*** DEL
           2237 S GLYCOLIC ACID/CN
           1792 S GLYCOLIC AND HYDROXYACETIC OR HYDROXY ACETIC OR GLYCOCIDE OR
L*** DEL
         394725 SEA L1 OR L2
L*** DEL
           4006 S L*** OR L***
L*** DEL
           1459 S L5 AND L6
L*** DEL
              2 S L7 AND MOSQUITO?
                D 1-
                D 2 IALL
L*** DEL
          58420 S GLYCOLIC OR HYDROXYACETIC OR HYDROXY ACETIC OR GLYCOCIDE OR G
L*** DEL
          58520 S L*** OR L6
             44 S L7 AND MOSQUITO? AND ATTRACT?
                D 1-44
L*** DEL1785158 S CARBON DIOXIDE/CN OR CO2 OR CO".SUB."2 OR CARBON DIOXIDE
L*** DEL
          5253 S L5 AND L7 AND L***
L*** DEL
            155 S (CO2 OR CO".SUB."2 OR CARBON DIOXIDE) (50A) L2 (50A) L6
L*** DEL
            127 DUP REM L*** (28 DUPLICATES REMOVED)
                D 1-50 KWIC
                D 50-60 KWIC
                D 61-90
                D 90- KWIC
L*** DEL
          6813 S CARBON DISULFIDE/CN
L*** DEL 69209 S (CARBON) (A) (DISULFIDE OR DISULPHIDE OR BISULFIDE OR BISULPH
L*** DEL 69209 S L6 OR L7
L*** DEL
           1424 S L*** AND L5
L*** DEL
           1381 DUP REM L*** (43 DUPLICATES REMOVED)
L*** DEL
           167 S L*** AND MOSQUITO?
L*** DEL
            161 DUP REM L*** (6 DUPLICATES REMOVED)
                D 1-161
            584 S (CARBON DIOXIDE/CN OR CO2 OR CO".SUB."2 OR CARBON DIOXIDE) AN
L*** DEL
L*** DEL
            570 DUP REM L*** (14 DUPLICATES REMOVED)
                D 1-570 KWIC
L*** DEL
            811 S L*** NOT L***
                D 1- KWUC
                D 811 IALL
```

FILE 'EMBASE, BIOSIS, EUROPATFULL, JAPIO, ADISCTI, ADISINSIGHT, ADISNEWS,

D 129
D 129 IALL

L6 80346 SEA PYRUVIC ACID/CN OR PYRUVIC OR OXOPROPANOIC OR OXO (2A)
PROPANOIC OR KETOPROPIONIC OR KETOPROPIONIC OR KETOPROPANOIC
OR KETO PROPANOIC OR ACETYLFORMIC OR ACTYL FORMIC OR PYRORACEMI
C OR PYRO RACEMIC

L7 91 SEA L6 AND MOSQUITO?
L8 68 DUP REM L7 (23 DUPLICATES REMOVED)
D 1-68
D 38 IALL
D 36 IALL